What is claimed is:

1. A low-temperature sintered dielectric ceramic material having a composition of ABO_3 type dielectric ceramic material where a 0.9 molar ratio or more lead is included in site A assuming the proportion of site B is 1, and at least one of tungsten and molybdenum is included, while density of the dielectric ceramic material, after sintering, is 7.5 g/cm^3 or larger, and the content of tungsten and molybdenum combined is less than 0.098 mole to 1 mole of lead.

2. The low-temperature sintered dielectric ceramic material according to claim 1, wherein tungsten and molybdenum are included with a higher concentration in the grain boundary than in the particles of the dielectric ceramic material.

3. A layered dielectric device having such a layered structure that electrode layers including copper as main component and having melting point of 1083°C or lower or electrode layers including silver or silver and palladium as main component are interposed between the layers of the low-temperature sintered dielectric ceramic material of claim 1.

4. A method, for producing the low-temperature sintered dielectric ceramic material of claim 1, which comprises using an auxiliary oxide is used that is made by adding the oxide of at least one of tungsten and molybdenum to lead oxide in proportion of:

$PbO\ x + (WO_3\ y + MoO_3\ z)$

where $x + y + z = 1$, $0.005 < y + z < 0.4$ and $y, z \geq 0$; adding 0.05 mol % to 20 mol % of said auxiliary oxide to a mixture of a stock material of low-temperature sintered dielectric ceramic material or calcination thereof that has a composition of ABO_3 type dielectric ceramic material where 0.9 molar ratio or more lead is included in site A assuming the proportion of site B is 1; mixing the material, followed by forming and further sintering.

5. The method for producing the low-temperature

sintered dielectric ceramic material according to claim 4, wherein said auxiliary oxide is made by adding the oxide of at least one of tungsten and molybdenum to lead oxide in a dry or a wet mixing process, then processing the mixture through calcination and crushing.

6. The method for producing the low-temperature sintered dielectric ceramic material according to claim 4 or 5, wherein the quantity of lead included in the stock mixture is set to the required quantity minus the quantity supplied from the lead oxide included in the auxiliary oxide, in the process of preparing the stock mixture to make the dielectric ceramic material.

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7. The method for producing the low-temperature sintered dielectric ceramic material according to claim 4, wherein said auxiliary oxide used in the production process has melting point in a range from a temperature at which shrinkage ratio of the dielectric ceramic material is 3% to a temperature at which the shrinkage stops.

8. The method for producing the low-temperature sintered dielectric ceramic material according to claim 5, wherein a sheet of said dielectric ceramic material made by adding the auxiliary oxide to the stock powder or calcined powder thereof is provided with an electrode layer printed and laminated thereon with the lamination being calcined at the same time

9. An auxiliary oxide to be used as an additive when sintering a ceramic material, and is made by adding the oxide of at least one of tungsten and molybdenum to lead oxide, while the content of tungsten and molybdenum combined is set in a range from 0.5 mol % to 40 mol %.

10. An auxiliary oxide to be used as an additive when sintering a ceramic material, and is made by calcination of an mixture of lead oxide and oxide of at least one of tungsten and molybdenum added to lead oxide, while the content of tungsten and molybdenum combined is set in a range from 0.5 mol % to 40 mol %.

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